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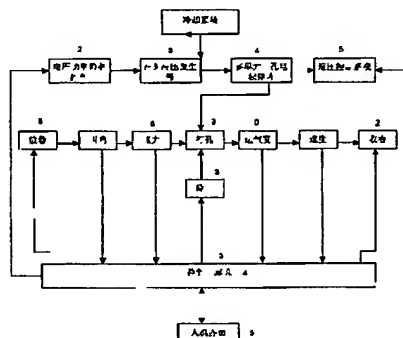
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(54) Title: THE PUNCH DEVICE FOR SUBSTRATE WITH LARGE BREADTH AND SMALL THICKNESS

(54) 发明名称: 宽幅薄型基材打孔装置



1. A COOLING SYSTEM
2. A VOLTAGE POWER AND FREQUENCY CONTROL UNIT
3. A HIGH FREQUENCY AND VOLTAGE GENERATOR
4. A MOTOR SPEED CONTROL UNIT
5. A HYDRAULIC CONTROL SYSTEM
6. A WINDING UNWINDING MECHANISM
7. A CORRECTING CONTROL UNIT
8. A PUNCH MECHANISM
9. A HIGH FREQUENCY AND VOLTAGE GENERATOR
10. A DETECTING UNIT
11. A SPEED CONTROL UNIT
12. A PULSE FREQUENCY AND PULSE WIDTH CONTROL UNIT
13. A USER INTERFACE

(57) Abstract: The present invention relates to the electric punching technical field, especially to a punch device for substrate with large breadth and small thickness. The device comprises a mechanism for winding and unwinding, a correcting control unit, a tension control unit, a hydraulic mechanism, a punch mechanism, a high frequency and voltage generator, a detecting unit, controlling means for speed, pulse frequency and pulse width control, and an user interface, characterized in that said punch mechanism is composed of at least two or more electrode matrixes, each electrode matrix is made up of a plurality of electrode bars longitudinally arrayed, which form an angle α with the movement direction of the substrate, each pair of the electrode bars is composed of an anode bar and a cathode bar on either side of the substrate, each bar is provided with electrode pins in the number of M. The advantage is that a unit area of the substrate to be processed can be punched multiple times when it passes through the working area, and thus not only a strip in the order of millimeter can be punched, but also a surface in the order of meter in width, especially in the breadth direction, can be punched evenly.

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本国际公布：

— 包括国际检索报告。

(57) 摘要：

本发明涉及屯打孔领域，特别涉及宽幅薄型基材打孔设备。它由收、放卷机构，纠偏控制、张力控制，液匝机构，打孔机构，高频高压发生器，检测机构，速度、电脉冲频率，脉冲宽度，控制装置，人机操作界面组成，其特征在于所述的打孔机构是由至少二个及以上屯板矩阵构成，屯板矩阵由均匀薄型基材运动速度方向成 α 夹角的排列的屯板条组成，每一屯板条由置于薄型基材平面两侧的正负屯板条构成，每一屯板条上设置多个电极。优点是：加工的薄型基材通过加工区域能实现任意位置范围内多次打孔，能在毫米级的条状范围内打孔，又能在幅宽为米级的面上均匀打孔且能保证在宽幅内均匀打孔。